

## **The analysis of environmental and anthropogenic factors influencing the landscape structure formation of the Kuang Bin province (central Vietnam)**

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### **Abstract**

Landscape formation of defined by geographical position of the territory, as well as local physiographic conditions. The modern landscape form on considerable territories is a result of natural influence, as well anthropogenic factors. Anthropogenic landscapes can hold a dominant position. Studying of natural and territorial complexes change for the purpose of rational environmental management is timely due to conditions of the Vietnam provinces high economy development. Thus cartographic research techniques, GIS-technologies, prognosis become highly important. Research includes analysis of landscapes classifications depending on the different mapping scale. The the Kuang Bin province landscape classification hierarchy from system to types of landscapes in scale 1:500000 is made. Thus analysis the landscape forming factors like human environment and economic activity is carried out. The mathematical apparatus is applied to mark anthropogenic impact degree assessment, erosive processes intensity including provoked by agriculture. Initial data files are transferred to attribute tables and processed by means of ArcGIS GIS-product. Differentiation of landscapes depending on geological and geomorphology conditions change from the west to the east, from mid-mountain territories and uplands to low coastal plains is revealed. The highest anthropogenic impact is concentrated in the east of the province where the maximal concentration of population, city settlements with processing industry and arable lands is observed.

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### **Keywords**

Cartographic method, Environment, GIS technology, Landscape, Natural and anthropogenic factors